

**MEMORANDUM**

DATE	October 20, 2016
TO	SVCIP Advisors
FROM	John Melville, Collaborative Economics
RE	Potential Replacement Indicators for SVCIP 2017 Report
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**Overview**

Every year, SVCIP advisors are asked to reflect on their experiences with the “innovation ecosystem” of Silicon Valley and identify important trends and issues impacting regional innovation. SVCIP updates 23 indicators of the health of Silicon Valley’s innovation ecosystem annually. To maintain continuity but also provide opportunity for new measures, advisors are asked to suggest up to four new indicators as replacements for existing measures. To that end, we have identified below some possible candidates to begin the discussion on October 25.

**Recommendation: Replace Last Year’s International Indicators**

Last year, SVCIP included three international measures. Because of the lack of comparable data for global regions, we included one indicator based on a 2015 survey that compared the innovation climate of a select number of international regions including Silicon Valley. (This survey has not been updated this year). Two other indicators were also included, although these measures were at the country, not regional level, and were thus of limited value. Thus, it was difficult to draw conclusions about how Silicon Valley compared with innovation regions globally.

**Options for Replacement Indicators**

*New Global City-Region Comparisons*

The Brookings Institution has just published comparisons of global city-regions that would allow us to make approximate comparisons in some areas important to innovation. These include measures on which we rank at or near the top globally: patents per capita, share of publications in the top 10% of cited papers, and venture capital per capita for San Jose and San Francisco Metro Areas. While several of these indicators are not as current as our other analysis (2012 and 2013), consistent metro-



level international comparison could be a compelling addition to the SVCIP report. Also included is average internet download speed (we are well behind Austin and several other regions on this measure).

### *Entrepreneurship*

Entrepreneurship is an area that SVCIP has not yet measured, but which is an important dynamic driving innovation regions. Fortunately, the Kauffman Foundation has updated an extensive study of entrepreneurship trends, comparing every metropolitan area in the United States. While the metro regions do not align perfectly with regional definitions in SVCIP, this analysis could still offer important insights. The study includes several interesting dimensions—specifically, the overall rate of entrepreneurship per capita, by gender, birth country, immigration status, and industry area (e.g., software). They also examine the start-up success rate (a five-year tracking of companies started in 2010). A caveat: on some of these measures, there is insufficient data to make regional comparisons.

### *Investment in Emerging Areas of Innovation*

While SVCIP reports overall investment trends at different stages, the source we use (CB Insights) also has additional information about the technology and product areas that are attracting investment. One option is to identify patterns of early investment in emerging areas of innovation to call attention to Silicon Valley's role as a pioneer.

### *A Side-by-Side Comparison of the Population, Employment, and Housing Growth Rates*

SVCIP does measure aspects of population and employment change, but does not explicitly call attention to the differential growth rates of these three factors. A side-by-side comparison showing employment growth outpacing population and housing growth will help people put these inter-related factors together and enable SVCIP to call attention to a critical need to sustain our innovation ecosystem.

### *Concentration of Key Innovation Occupations*

Specific kinds of talent have a larger impact on regional innovation than others. Looking at Silicon Valley's concentrations by key occupations, and comparing those concentrations to other innovation regions, could provide new insights into the importance of both continuing to attract and producing more local graduates in these occupational areas.

### *Update to the Cost of Doing Business/Productivity Comparison*



This indicator was included in the 2015, but not the 2016 SVCIP report. The comparison of cost and productivity provides a context for discussion about higher-cost regions that are also higher-productivity innovation regions vs. a more limited (and common) comparison of regions based solely on cost of doing business.